Utilities

WHAT YOU WILL FIND IN THIS CHAPTER:

- A description of the utility systems and providers in the City of Tukwila;
- Goals and Policies for providing effective utility service to Tukwila's residents; and
- Strategies for implementing the City's policies and working with private utility providers.

PURPOSE STATEMENT:

To provide utility services and facilities that meet the community's current and future needs in a safe, reliable, efficient, economic and environmentally responsible manner.

PURPOSE

The availability and adequacy of utility facilities and services are closely linked to the development of land, affecting whether, how, and when it can be developed, as well as to other comprehensive plan elements and goals. The City of Tukwila provides a range of utility facilities and services and also relies on other public and private agencies to provide many of these services.

Sewer, water, surface water management, solid waste, electricity, natural gas, and telecommunications are addressed in this Element. Policies pertaining to utilities and vegetation are located in the Natural Environment element. The Utilities Element profiles both City and non-City-owned utilities operating within Tukwila. Sewer and water services are provided by the City, adjacent municipalities, and special districts. Surface water drainage is managed locally, but with interjurisdictional and watershed wide cooperative planning and management. The remaining utilities are provided to residents and businesses through franchise agreements between the City and service providers.

The Utilities Element establishes a basis for decision-making that is consistent with Washington's Growth Management Act, the Puget Sound Regional Council's Vision 2050, and King County's Countywide Planning Policies, including targets for housing units and employment, which are a basis for determining demand for utility services and infrastructure. These State and regional requirements are fulfilled by the Utilities Background Report, Comprehensive Sanitary Sewer Plan, Comprehensive Water Plan, and the Surface Water Comprehensive Plan. These documents, along with the six-year Capital

Improvement Program and the City of Tukwila budget, are adopted by reference in Tukwila's Comprehensive Plan.

TUKWILA UTILITY PROVIDERS WATER

City of Tukwila City of Seattle City of Renton

King County Water District #20 King County Water District #125

Highline Water District

SEWER

City of Tukwila
City of Seattle
City of Renton
Valley View Sewer District

SURFACE WATER
City of Tukwila

ELECTRICITY

Puget Sound Energy Seattle City Light

NATURAL GAS
Puget Sound Energy

REGULATORY REQUIREMENTS

This element is consistent with Washington State GMA, PSRC Vision 2050, and King County County-wide Planning Policies requirements for utilities planning, based on housing and employment targets.

These requirements are fulfilled by the following

documents:

Utilities Background Report

Comprehensive Sanitary Sewer Plan

Comprehensive Water Plan

Comprehensive Surface Water Management Plan

ISSUES

Several key issues in meeting the utility needs of the City are addressed in this Utilities Element:

<u>Service Extensions</u>. Planned extensions of utility services are based on existing needs, or to accommodate planned growth or growth targets.

<u>Coordination of Service Providers</u>. The City-managed utilities must coordinate with adjacent providers that provide utility services to portions of the City. Coordination among Tukwila's three non-City sewer and five non-City water districts is critical.

<u>Concurrency and Implications for Growth</u>. Utility projects and other capital facilities must be developed so that improvements are in place by the time they are needed, to address growth and to accommodate growth targets.

<u>Environmental Sustainability</u>. Utility planning and operations requires compliance with federal and state laws including the Clean Water Act, NPDES, ESA, State Waste Discharge Permit, and contributes to watershed-wide restoration efforts to preserve the quality of the natural environment.

<u>Residential Neighborhood and Sub-Area Vitality</u>. City-planned utility improvements and extensions place priority on improving and sustaining residential neighborhood quality and

livability. Utility investments affect neighborhood quality of life and contribute to human health and vitality and the ability to realize established visions for specific sub-areas.

System Rehabilitation, Replacement, and Retrofit. Much of the City's utility infrastructure has reached or is near its life expectancy. Rehabilitation or replacement of these systems is needed to ensure their continued reliability. Federal, State, and local polices require utility system improvements to comply with new regulations.

SYSTEM DESCRIPTIONS

WATER AND SEWER

The City of Tukwila purchases all of its water from the Cascade Water Alliance under a contract through the year 2064. Tukwila's Comprehensive Water System Plan identifies areas of water supply and distribution deficiency, and the six-year Capital Improvement Plan proposes corrective improvements. See Map U-1.

The Tukwila sewer system is exclusively a collector system with no treatment component. King County DNRP Wastewater Treatment Division provides Regional wastewater treatment at the South Treatment Plant in Renton. The Comprehensive Sewer System Plan identifies deficiencies in the system, and corrective improvements are proposed in the six-year Capital Improvement Plan. See Map U-2.

Certain areas of the City are served by other water and sewer providers, which develop their own plans in coordination with the City of Tukwila.

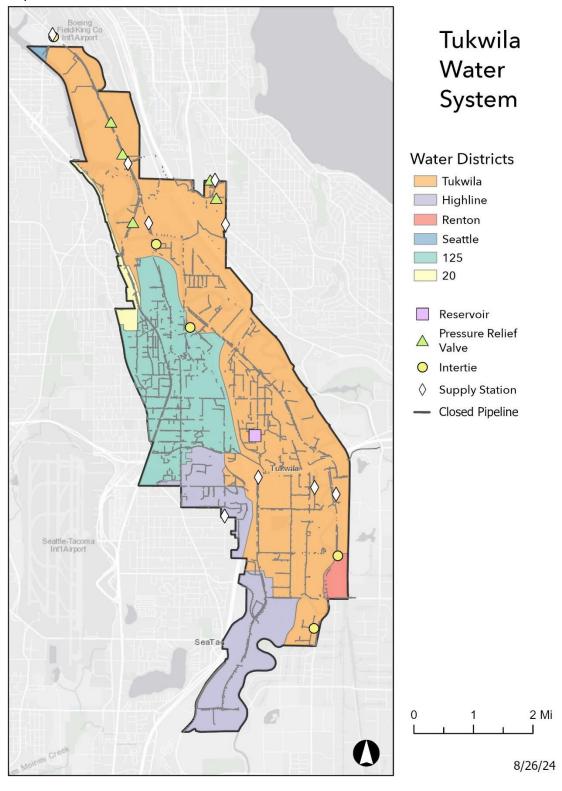
Tukwila's Comprehensive Water System and Sewer System Plans are adopted by reference as part of the Comprehensive Plan. Those system plans identify present and future improvements and establish certain required levels of service and priorities for system improvements. Level of service standards are also established by applicable Board of Health regulations, the Uniform Plumbing Code, and the Uniform Fire Code. Consistent with State mandates, Tukwila revises and updates system plans to assure consistency with the Comprehensive Plan and the Capital Improvement Program.

SURFACE WATER MANAGEMENT

Tukwila's surface water system consists of both built stormwater drainage infrastructure and surface waters such as rivers and creeks. All of the City's sub-basins drain to the Green/Duwamish River. For locations of surface water management facilities, see *Map U-3*.

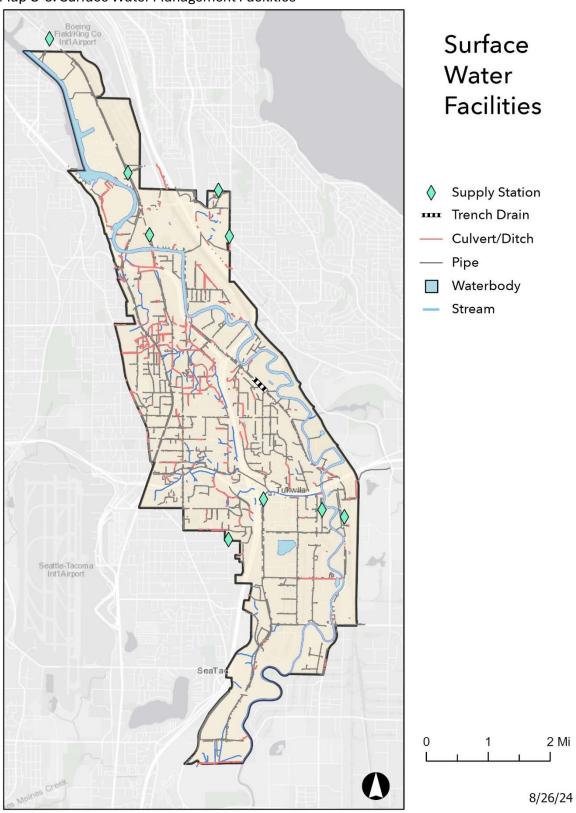
The Surface Water Comprehensive Plan contains an inventory of existing facilities and identifies current system deficiencies and planned improvements. It evaluates the system under present development conditions and identifies remedies for segments of the system where problems exist or are likely to develop in the future as a result of growth and development. Proposed improvements are included in the Six-Year Capital Improvement Program (CIP).

Map U-1



Tukwila Sewer System **Sewer District** Tukwila Valley View Renton Seattle None Treatment Plant Lift Station Sewer Pipeline Force Main Pipeline Seattle-Tacoma Int'l Airport 2 Mi 8/26/24

Map U-2: Tukwila Sewer System



Map U-3: Surface Water Management Facilities

The City reviews and updates its Surface Water Management Plan annually to assure consistency with this Plan, State and local regulations, the CIP, and other ongoing City planning processes.

TURNING WASTE INTO ENERGY

King County's Cedar Hills Landfill is the destination for much of Tukwila's solid waste.

The landfill has a gas-to-energy project which leads to cleaner air and reductions in greenhouse gas emissions. In 2021, the landfill generated an average of about 6,500 standard cubic feet per minute of landfill gas. This gas is transmitted to the Bio Energy Washington (BEW) gas-to-energy plant and converted into pipeline-quality biogas. The renewable gas produced equals the amount of energy needed to meet the natural gas needs of over 17,500 homes in King County.

Image source: King County Solid Waste Division

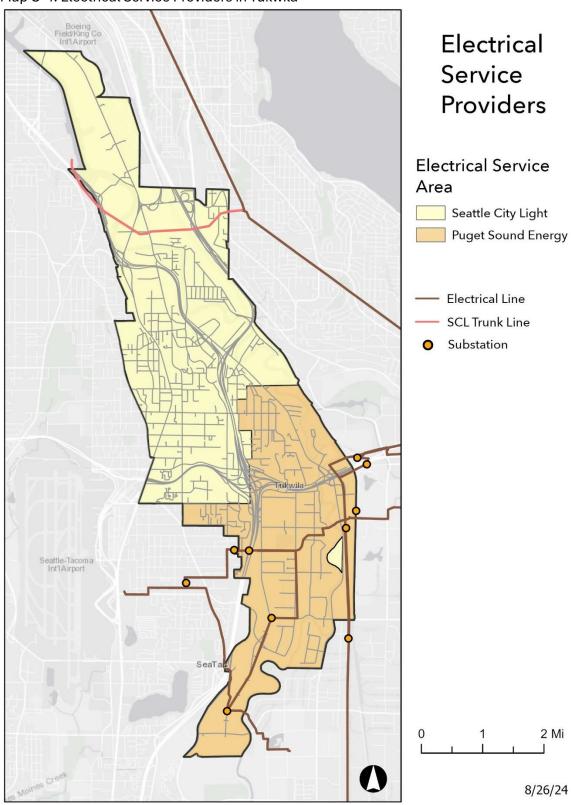
SOLID WASTE

Solid Waste collection, transportation and disposal in Tukwila is governed by State and local regulations, an interlocal agreement with King County, and collection contracts with solid waste providers. Through a competitive ten-year contract with the City, as of November 1, 2023, Recology provides comprehensive garbage, recycling, and food and yard waste collection services to residential, multifamily, and commercial customers. Residential garbage collection is voluntary.

The City's solid waste is ultimately taken to King County's Cedar Hills Landfill for disposal. As part of the Solid Waste Interlocal Agreement (ILA) with King County, Tukwila and other parties will develop plans and alternatives to waste disposal at Cedar Hills Landfill in advance of its closure in 2038.

ELECTRIC POWER

Electric power involves both transmission systems and distribution systems. Tukwila's electric power is provided by Puget Sound Energy, with approximately 3,800 customers, and Seattle City Light, serving approximately 5,700 residential and 1,000 commercial customers in Tukwila. Both companies operate under non-exclusive franchise agreements with the City. See *Map U-4*.



Map U-4: Electrical Service Providers in Tukwila

Plans from both Seattle City Light and Puget Sound Energy place a priority on using energy conservation as a way to increase service capacity. Puget Sound Energy estimates that half of its long-term need for electric power can be met by energy efficiency and additional wind-power. The rest is likely to be met with added natural gas-fired resources. To meet future demand, some new transmission lines and substations will be built in Tukwila, and existing ones rebuilt and/or maintained. Distribution plans include line and station projects. Future distribution improvements will be required to meet the demands of Tukwila's projected growth. Seattle City Light's plans for future distribution capacity include additional feeder capacity that is expected to meet demand in Tukwila through the year 2031. Seattle City Light intends to meet electrical load growth through conservation and new generation resources powered by renewable energy.

NATURAL GAS

Puget Sound Energy, an investor-owned utility, builds, operates, and maintains natural gas facilities serving approximately 3,400 customers in Tukwila. Puget Sound Energy covers virtually all of Tukwila with their main distribution lines. The utility foresees no difficulties in meeting future demand during the planning period. No major improvement projects are planned at this time. For natural gas service areas in Tukwila, see *Map U-5*.

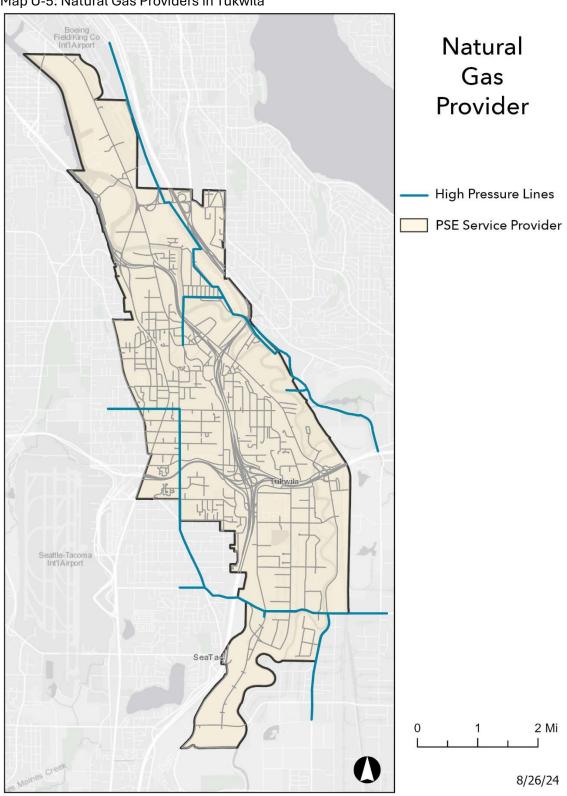
TELECOMMUNICATIONS

As telecommunications technologies have evolved, convergence of these technologies has occurred, resulting in multiple communication services migrating into consolidated networks.

Telecommunications in Tukwila includes both wired and wireless telephone services, cable and satellite television, and high-speed broadband technology. Through partnerships with franchised telecommunications companies, internal public works projects and completion of capital projects, the City has a robust conduit infrastructure that would enable and facilitate future fiber optic connectivity projects benefitting the City, its residents and businesses, and project partners. The City has joined a connectivity consortium of cities and other public partners that would construct and maintain a regional fiber-optic telecommunications system. This fiber-optic system would provide redundancies, enhance communications networks, and emergency operations.

CABLE AND SATELLITE TELEVISION

The City of Tukwila has a non-exclusive franchise agreement with Comcast Corporation to construct, operate and maintain a cable system in compliance with Federal Communications Commission (FCC) regulations. Comcast's network provides high-definition television capacity and high-speed internet access through cable modems, and includes coaxial and fiber optic cabling systems deployed both underground and overhead using utility poles leased from power and telephone companies.



Map U-5: Natural Gas Providers in Tukwila

Satellite television competes directly with cable television by delivering hundreds of channels directly to mini-dishes installed in homes and businesses throughout Tukwila.

WIRELINE AND WIRELESS COMMUNICATIONS

Many companies offer telecommunications services including integrated voice and data, and voice over internet protocol (VoiP) technology. CenturyLink, the Incumbent Local Exchange Carrier (ILEC), is now joined by several Competitive Local Exchange Carriers (CLECs) in providing more communications service options to Tukwila residents and businesses.

With expansion of telecommunications infrastructure, new technologies and competition, telecommunications utilities are expected to meet voice, video, and broadband demands during the planning period.

GOALS, POLICIES AND STRATEGIES

GOAL 1 Utility services and facilities that meet the community's current and future needs in a safe, reliable, efficient, economic, and environmentally responsible manner.

POLICIES FOR CITY-MANAGED UTILITIES

Service Extensions

- Policy 1.1 Ensure that the City of Tukwila utility functional plans and operations meet applicable federal, State, regional and county requirements and regulations to address health and safety requirements, address deficiencies, and assure quality of service.
- **Policy 1.2** Require the use of Tukwila's applicable service standards to design and construct all utility service extensions.
- **Policy 1.3** Base the extension and sizing of utility system components on applicable design standards and Comprehensive Plan development priorities.
- Policy 1.4 Ensure that new development, redevelopment, and other actions within the City of Tukwila's jurisdiction do not cause significant adverse upstream or downstream impacts on flooding, erosion, and natural resources within and outside of Tukwila's jurisdiction.

Coordination of Service Providers

Policy 1.5 Coordinate with service providers for reliable and cost-effective utility services to the public.

- **Policy 1.6** Coordinate with other jurisdictions and agencies in planning and implementing utility operations, facility additions and improvements located in or affecting multiple jurisdictions.
- **Policy 1.7** Participate in the regulation of all water, sewer, and surface water utility services within the City's boundaries.
- **Policy 1.8** Allow utility service outside City boundaries only when required by adjustments to City limits or to provide temporary service due to emergency.
- Policy 1.9 Establish and maintain franchises and working agreements with electricity, gas, sewer, and water utilities currently operating within the City limits, to ensure that the level of service provided is consistent with the City's requirements and revitalization plans.
- **Policy 1.10** Allow special-purpose sewer and water districts to continue to operate and serve Tukwila residents and businesses, when appropriate.

Concurrency and Implications for Growth

- **Policy 1.11** Schedule and phase utility extensions to occur concurrently with expected growth and development.¹
- **Policy 1.12** Approve development only if adequate utilities are available when a need is created for those facilities, or within a reasonable period as required by State law.

Equity

Policy 1.13 Promote affordable and equitable access of public services, including drinking water and telecommunication infrastructure, to provide access to all communities, especially underserved communities²

Environmental Sustainability

- **Policy 1.14** Provide environmentally sound and sustainable operations with cost-effective methods in water, sewer, and surface water management utilities operations.
- **Policy 1.15** Make conservation and efficiency efforts an integral part of Tukwila's utility operations and management.³
- **Policy 1.16** Promote energy efficiency, conservation methods, and sustainable energy sources in utility operations to support climate change reduction goals.
- **Policy 1.17** Consider Tukwila's Urban Forest together with other green stormwater infrastructure systems during utility planning, design, installation

and/or maintenance – to ensure that trees and water quality are protected.

Policy 1.18 Require water reuse and reclamation, where feasible, especially for high-volume non-potable water users such as parks, schools, and golf courses.⁴

Neighborhood and Sub-Area Vitality

P Policy 1.19 Give priority to the City's regional growth and manufacturing/industrial centers, while balancing the needs of residential neighborhoods for City-planned utility improvements and extensions.

Policy 1.20 Design, construct, and maintain facilities to minimize impacts on adjacent neighborhoods and businesses.

Water Utility

Policy 1.21 Actively participate in determining a regional solution to Tukwila's water supply and addressing the potential impacts of climate change and fisheries protection on regional water resources.⁵

Policy 1.22 Provide safe, reliably maintained, and sustainable water service for domestic, commercial, industrial, fire flow and water emergency uses, to meet present and future needs. 6

Sewer Utility

Policy 1.23 Serve all existing and potential residences and businesses with a sewer utility.

Policy 1.24 Replace failing septic systems within the City with sanitary sewers or alternative technology that is comparable or better.⁷

Surface Water Utility

Policy 1.25 Serve all of Tukwila's residences and businesses with a surface water utility.

Policy 1.26 Provide capital, maintenance, education, and enforcement programs as a function of the surface water utility.

Policy 1.27 Require low impact development techniques including green stormwater infrastructure for both development and redevelopment projects.

Policy 1.28 Apply an adopted surface water design manual and all appendices as the minimum requirement for all development projects and other actions that could cause or worsen flooding, erosion, water quality and habitat problems, for both upstream and downstream development.

Policy 1.29 Coordinate water quality improvement programs with adjoining jurisdictions whose surface waters flow into or through Tukwila.

Policy 1.30

Use the Surface Water Fund to retrofit surface water systems to improve water quality, support forest conservation and restoration, restore aquatic and riparian habitat and enhance fish passage, by establishing:

- A water quality retrofit program that prioritizes projects based on need, benefit, and other criteria, and takes into account Washington Department of Ecology's expanded listing of impaired water bodies; and
- A Habitat restoration programs that restore aquatic and riparian habitats and remove fish barriers. Project priorities are based on habitat needs, benefits and other criteria and meet regulatory requirements.
- An urban canopy preservation program that emphasizes supports citywide canopy preservation policies and strategies.

Policy 1.31

Encourage the retention and planting of trees for their beneficial effects on surface water runoff, including flow attenuation, water quality enhancements and temperature reduction including through the use of Green Stormwater Infrastructure, such as rain gardens.

UTILITIES NOT OPERATED BY THE CITY

Aside from water, sewer and surface water management, most utilities serving the residents of Tukwila are not owned or operated by the City. While the City can provide input on planning efforts for these utilities, it does not directly control service rates or the exact location of new infrastructure.

Private utilities are required to obtain any City permits necessary to operate or install infrastructure within the City and must comply with all applicable City and State regulations.

Image Source: Puget Sound Energy

POLICIES FOR NON-CITY-OWNED UTILITIES

Non-City-owned utilities develop strategic and operational plans with varying degrees of input and involvement from the City. They set capacity and service levels on an area-wide basis and rely on the local government's involvement to ensure that capacity is sufficient.

As a condition of applying for a permit, new development that uses non-City owned water and sewer utilities is required to obtain a letter of service availability. This letter establishes that utility service meeting City standards is either available or will be available prior to occupancy.

The electric power and natural gas utilities project adequate capacity during the 20-year planning period, assuming responsible use of these resources. Electric utility capacity is set regionally, with Tukwila's needs determined and provided for as part of an area-wide system. Similarly, natural gas is provided via a regional delivery system.

With new technologies, telecommunications utilities project virtually limitless capacity within the planning horizon.

Through long-term Interlocal Agreements (ILAs), the solid waste system will continue to be upgraded to meet Tukwila's current and future needs. The Cedar Hills Landfill expects to reach full capacity in 2025. The current ILA that expires in 2040 addresses the process that cities and King County will follow to develop disposal options prior to Cedar Hills Landfill reaching its full capacity. Tukwila and other suburban cities participate in planning and contribute to reaching regional goals via their recycling and waste reduction strategies and practices.

General Policies

- **Policy 1.32** Actively coordinate project implementation with individual utilities, based on Tukwila's Comprehensive Plan and development regulations.
- **Policy 1.33** Require new development that uses non-City-owned water and sewer utilities to obtain a letter of service availability as a condition of receiving a Tukwila permit.
- Policy 1.34 Require utilities operating in the right-of-way to obtain a franchise that includes service levels and requirements meeting Comprehensive Plan forecasts and other applicable federal, State, and local regulations.
- **Policy 1.35** Encourage utilities to consolidate facilities, use existing transportation corridors, and minimize visual impacts of facilities, where technically feasible.
- Policy 1.36 Encourage communication between the City of Tukwila, the Washington Utilities and Transportation Commission, and the utilities regarding cost distribution and rate-setting for existing and proposed facilities and services.
- Policy 1.37 All new electrical and communication facilities shall be constructed underground, unless specifically exempted by the Tukwila Municipal Code or determined by the City Council to be financially impractical.
- Policy 1.38

 If a utility relocation is required by a public works project such as a street widening project, utility repairs or upgrades or any major replacement of aerial facilities, the relocated/replaced facilities shall be underground, unless the City determines that doing so is not in the best interest of the public.

Policy 1.39 Recognize and support agreements with water purveyors to promote effective conveyance of water supplies and secure adequate supplies for emergencies.8

Telecommunications

Policy 1.40 Provide telecommunication infrastructure to serve growth and development in a manner consistent with Tukwila's vision, as outlined in the Comprehensive Plan.

Policy 1.41 Encourage the equitable provision of telecommunication infrastructure and affordable, convenient, and reliable broadband internet access to businesses, and households of all income levels, with a focus on underserved areas.⁹

Solid Waste Management

- **Policy 1.42** Reduce the solid waste stream and encourage reuse and recycling.¹⁰
- Policy 1.43 Maintain a comprehensive solid waste management program that includes environmental responsibility and sustainability, competitive rates, and customer service excellence for Tukwila's residential, multifamily, and commercial customers.
- Policy 1.44 As current franchise agreements expire in areas annexed to the City, provide waste management services that are consistent with that provided to other areas of the City. 11
- **Policy 1.45** Encourage and actively participate in a uniform regional approach to solid waste management.

Electric and Gas Utility

- Policy 1.46 Reduce the rate of energy consumption and use efficiency and conservation as a means to lower energy costs and mitigate environmental impacts associated with traditional energy supplies.¹²
- Policy 1.47 Promote use of renewable and alternative energy resources to help meet long-term energy needs, reduce environmental impacts associated with traditional energy supplies, and increase community sustainability.¹³
- **Policy 1.48** Ensure that development regulations are consistent with and do not otherwise impair fulfilling public service and other obligations imposed by federal and State law.
- Policy 1.49 Actively support the greenhouse gas reduction policies pertaining to utilities described in the Natural Environment Element of this Comprehensive Plan (*The locations of these policies will be listed during final formatting*)¹⁴.

RELATED INFORMATION

Utilities Background Report

Tukwila Water Plan

Tukwila Sewer Plan

Tukwila Surface Water Plan

Tukwila Capital Improvement Program (CIP)

Valley View Sewer District

City of Renton Utilities

City of Seattle (Water, Sewer)

Highline Water District

King County Water District #125

King County Water District #20

Puget Sound Energy (Electric, Natural Gas)

Seattle City Light

Waste Management, Inc. (Solid Waste, Recycling)

¹ Supporting a PSRC-RGC requirements (Public Services)

² Vision 2050, MPP-PS-2, PS-16, PS-22

³ Partial for King County Countywide Planning Policy K_PF-10

⁴ King County Countywide Planning Policy, PF-11

⁵ King County Countywide Planning Policy K_PF-5

⁶ King County Countywide Planning Policy K_PF-6

⁷ MPP-PS-11

⁸ King County Countywide Planning Policies, K_PF-9 - policy has been pared back from scope of original

⁹ King County Countywide Planning Policies, PF-17

¹⁰ King County Countywide Planning Policies, K_PF-14

¹¹ This is a clarification of the circumstances – it relates to waste disposal in Tukwila South.

¹² King County Countywide Planning Policies, K_PF-15

¹³ King County Countywide Planning Policies, K_PF-16

¹⁴ In the interests of reducing repetitiveness in the Plan, policies pertaining to the reduction of greenhouse gases have been moved to the Natural Environment element.